

# Bespoke precast

From the drawing board  
to reality



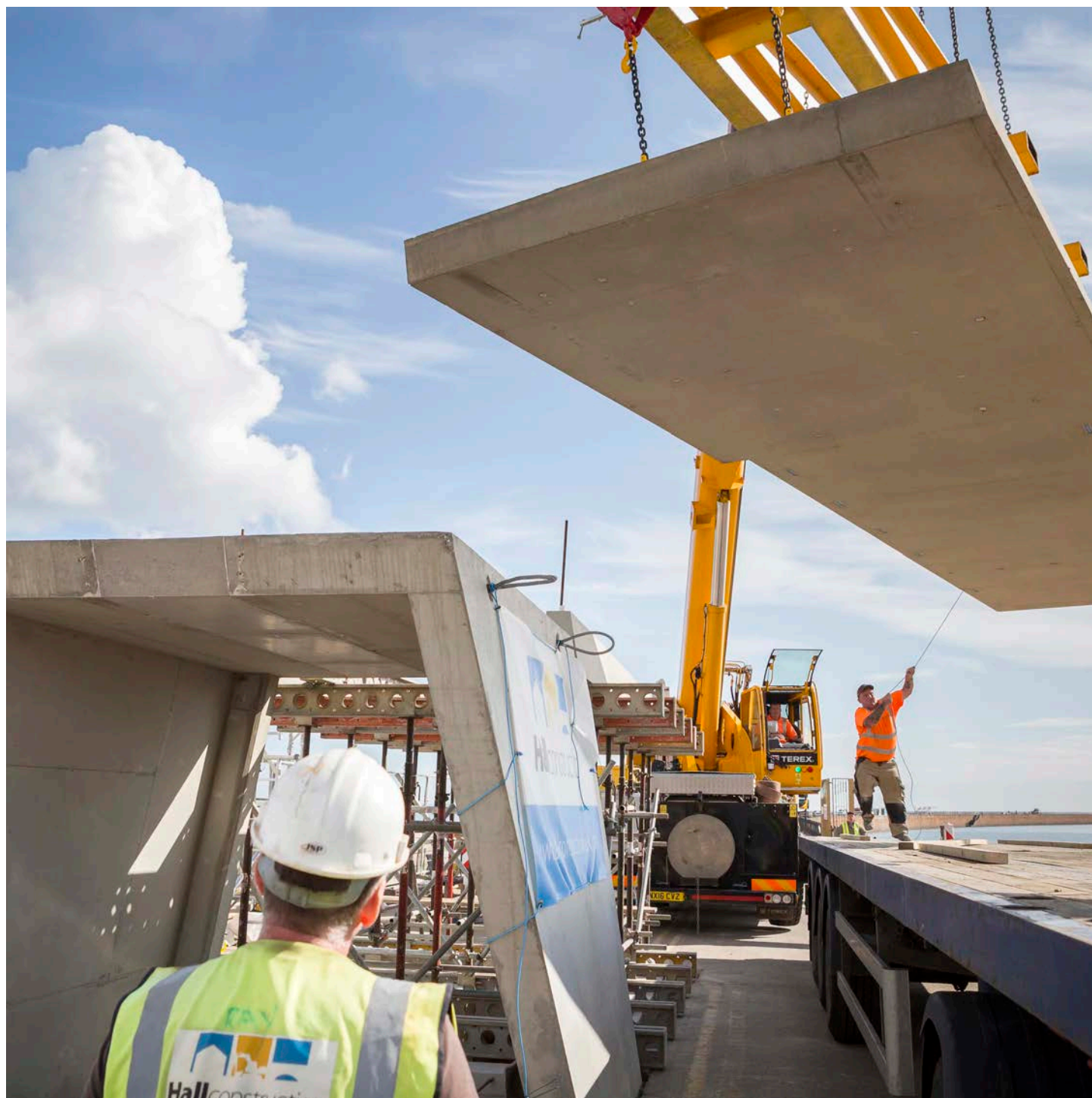


# Introducing Poundfield Precast

Poundfield Precast Ltd is a leading precast concrete manufacturer operating nationwide from 3 locations in East Anglia, the North West and South Wales. We're part of SigmaRoc, a large construction materials group.

Our bespoke team of designers and technicians offer a comprehensive, full turn key solution, from design through to installation on any customised requirements.

For more information, please visit [www.poundfield.com](http://www.poundfield.com)



# Creating bespoke solutions for your precast needs

While our standard range of precast concrete products solve everyday problems, many construction projects require bespoke units to fulfil a very specific task. From one off units to multiple pieces, our bespoke precast concrete division provides solutions for your concrete requirements.

Experienced in creating precast units for a number of sectors and uses, our

dedicated design and manufacturing teams are able to work from technical drawings, or create solutions from scratch, in partnership with your own designers or technical specifications.

With mould manufacturing facilities on-site, we can create unique pieces of any shape and with specialist finishes that can be applied during the casting stage.

*“Poundfield Precast manufactured a set of concrete panels for our project on the Grade I Listed Menai Suspension Bridge. The panels were of excellent quality and the team are easy to do business with.”*

*Spencer Group*



## Design

When designing precast solutions, our dedicated design team work directly with the client to provide innovative solutions which are effective and cost efficient.

Our design team includes AutoCAD technicians and we can create GA drawings, unit drawings, detail drawings and bending schedules for any bespoke project across any sector.





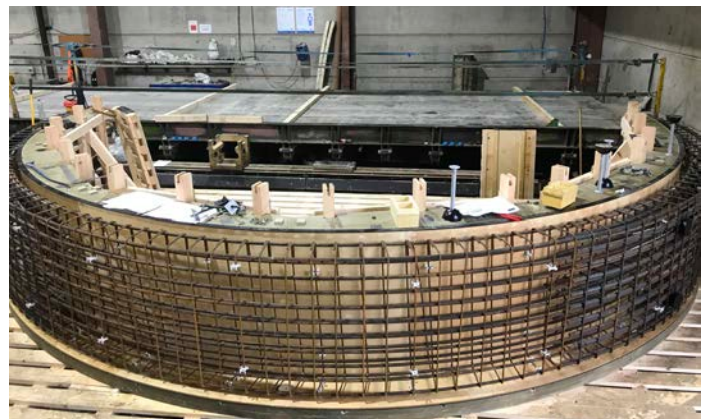


## Manufacturing

Once designed and tested electronically, we create bespoke moulds in which to cast the concrete for your project. For one-off casts, our team of skilled carpenters create timber moulds. Repeat casting requires a more substantial, fully engineered steel mould. These moulds are capable of producing an unlimited number of repeat casts, each one identical to the one before it.

Where a specialist finish is required, this is applied during the casting stage to produce a factory-controlled finish, which can be replicated time and again. Completing this process during the casting stage saves time on site and produces an effect that is guaranteed to outlive any post applied finish.

We have the capacity to produce up to 600m<sup>2</sup> of precast concrete per day and can manufacture units weighing up to 20 tonnes. Working closely with industry experts, we produce



consistent mix designs, which have been tested to exacting standards. Using the latest computer equipment, the finished product is guaranteed to be of optimum quality.

Once manufactured, we offer a full quality control package, including pre & post check sheets, cube results and cares certificate so you can be certain the project is completed to the highest of standards.



## Installation

Our units have been manufactured for ease of installation, with forklift tine holes or lifting points cast in to enable easy transportation and handling when on-site.

For larger concrete units, we work with our lifting and fittings supplier to create special lifting frames to manoeuvre the concrete into position directly from the lorry. This relationship allows us to design, manufacture, test and certify the equipment ahead of delivery to ensure its efficient operation on-site.

Depending upon your requirements, we can work on a supply only basis or our in-house project management team can offer a full turnkey solution from design through to installation.





# Civils and infrastructure

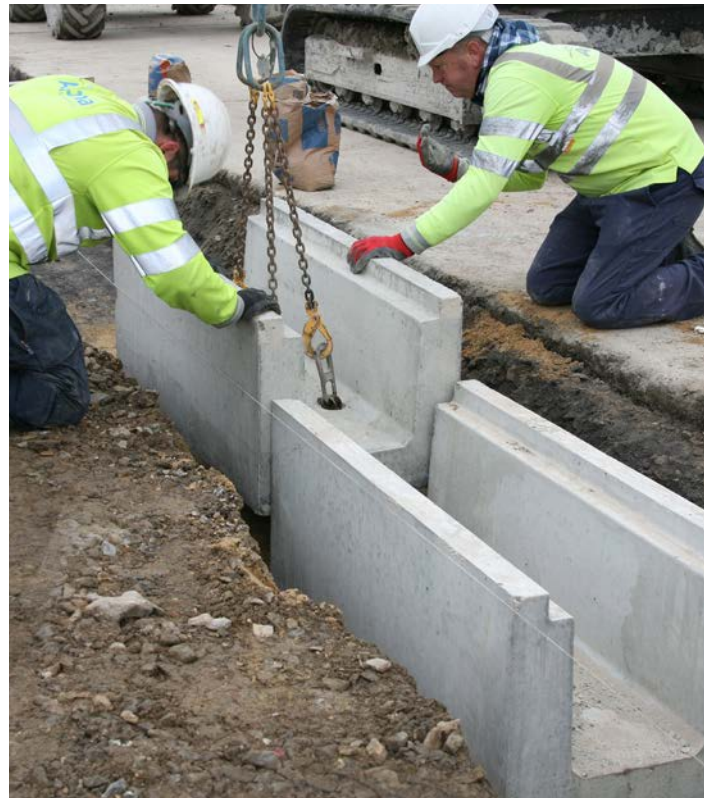


We have supplied concrete products to a number of civil and infrastructure projects, including bridge replacement projects, urban and coastal regeneration schemes, railway platform extensions, and drainage and cabling schemes.

Functional as well as aesthetically pleasing, civils projects require precast solutions created to exact specifications. Working with national building groups, Poundfield has continually created bespoke concrete solutions for complex projects of all sizes.

Fitting in with the existing infrastructure is of vital importance. For example, at our client's request we used locally sourced building materials for the Ladies Walk project in Southwold, where we procured local stone to provide an exposed aggregate finish in keeping with the surrounding area.

Amongst other assignments, we have provided reinforced precast concrete components for major civils contractors including a replacement bridge deck across the river Deben, and hundreds of trough sections to major National Grid sites for use in cabling and drainage.





## Moveable Road Barriers

Major Government infrastructure project near Dover.

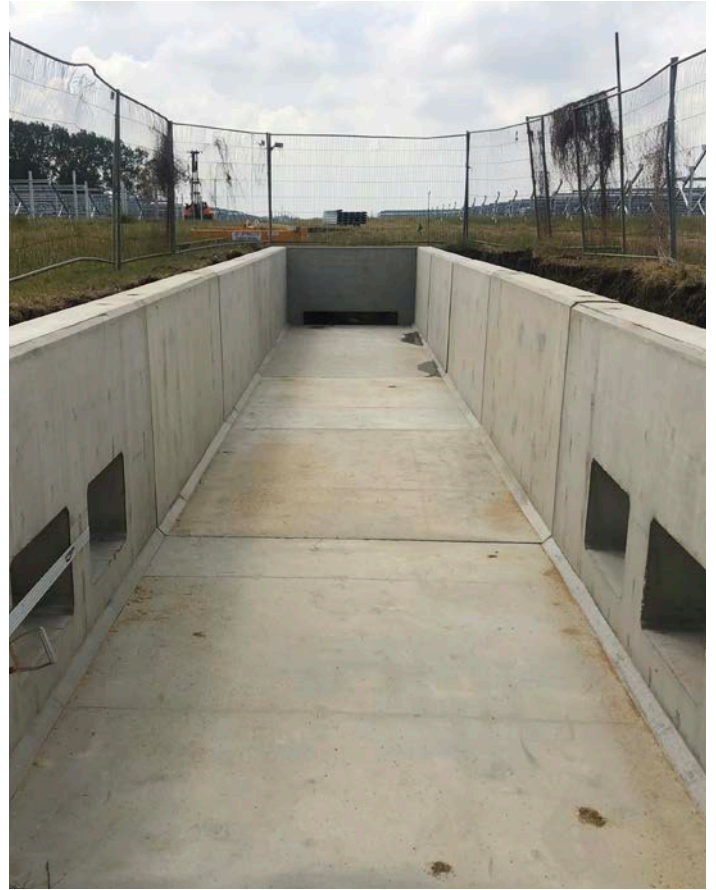




## Battery troughs

Chelveston, Northants.

Units cast in steel moulds and eventually submerged in the ground on site.



## Ditch liners

Civils project in Great Yarmouth.



## Saddle unit (manhole cover)

Cricklewood railway siding.





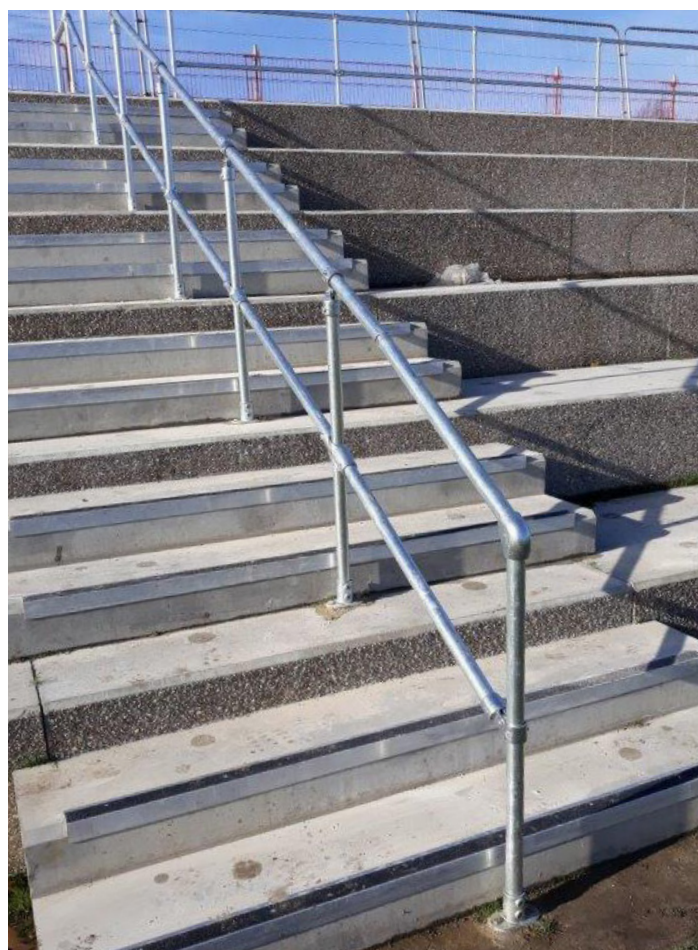
## Retaining walls

Sunderland Strategic Transport Corridor civils project.



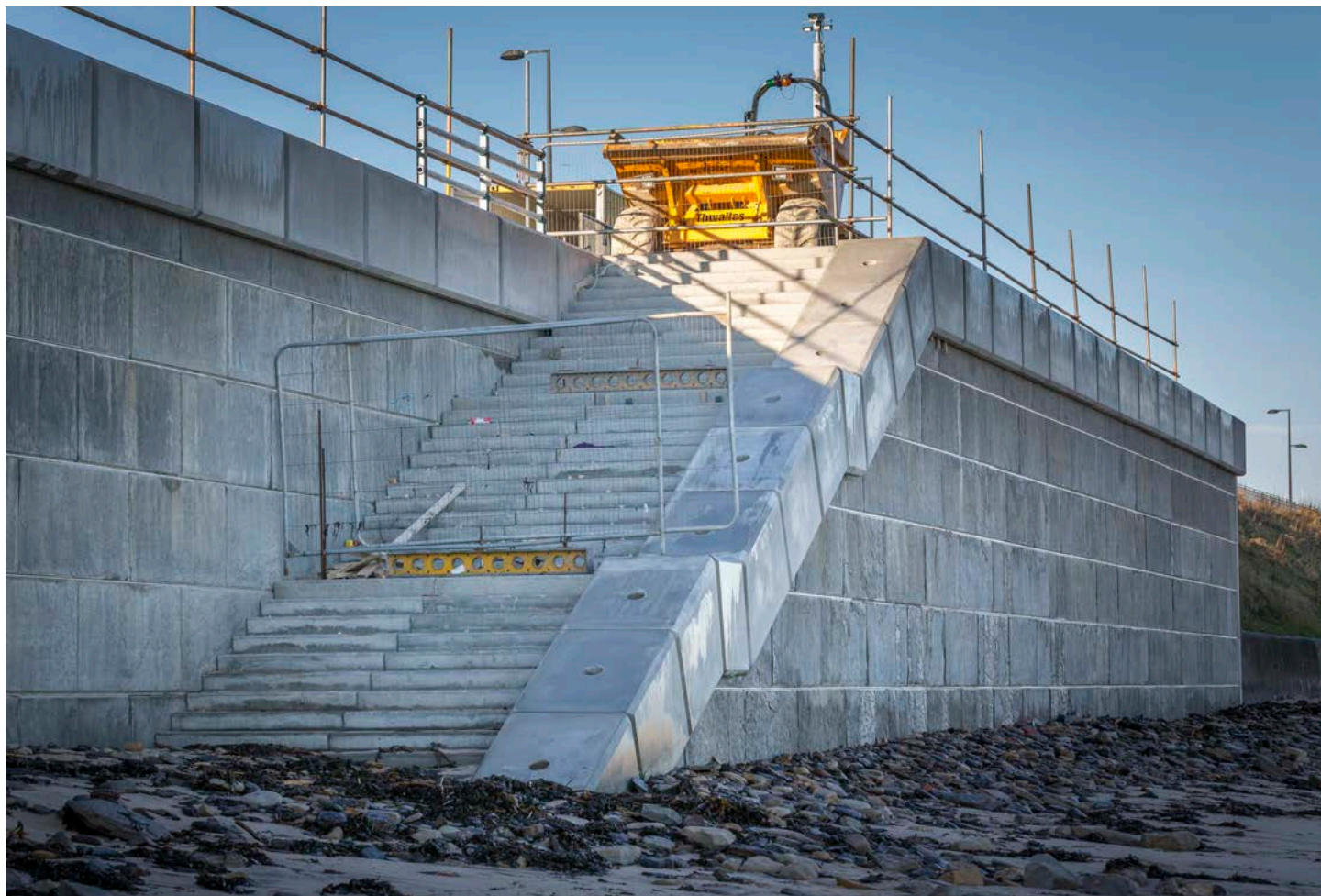
## Terracing units and steps

Radcliffe and Redvales flood defence scheme, Manchester.





# Marine and coastal

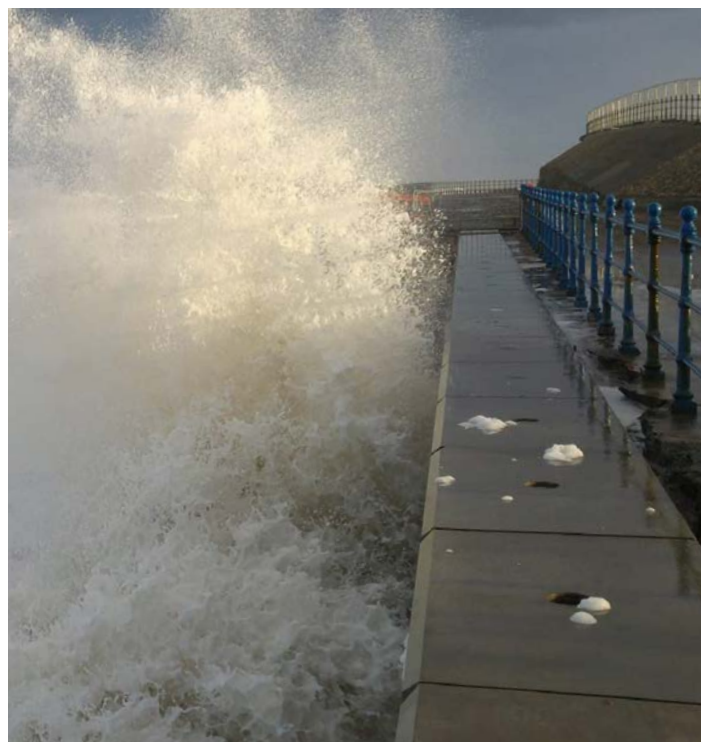


Marine and coastal projects are a particular speciality of ours. Due to its inherent properties, concrete is particularly effective in these environments, providing protection from tidal conditions.

Designed in accordance with BS EN 206-1 our specialist marine mix has been manufactured to ensure our walls can withstand corrosive and physical attacks from the sea. If you have your own mix design, our computerised mixing systems can make these to your exact specification.

We have worked on a number of high-profile sea defence projects, as well as flood protection schemes and areas where the flow of water needs to be managed effectively. We frequently work with designers and organisations like The Environment Agency to meet their specification requirements.

For more information about these specialist projects, see our specific guide to coastal sea defences.





## Whitley Bay

1,800 bespoke sea defense wall panels.



## Hartlepool

2km of sea wall strengthened as part of the coastal protection development plan.





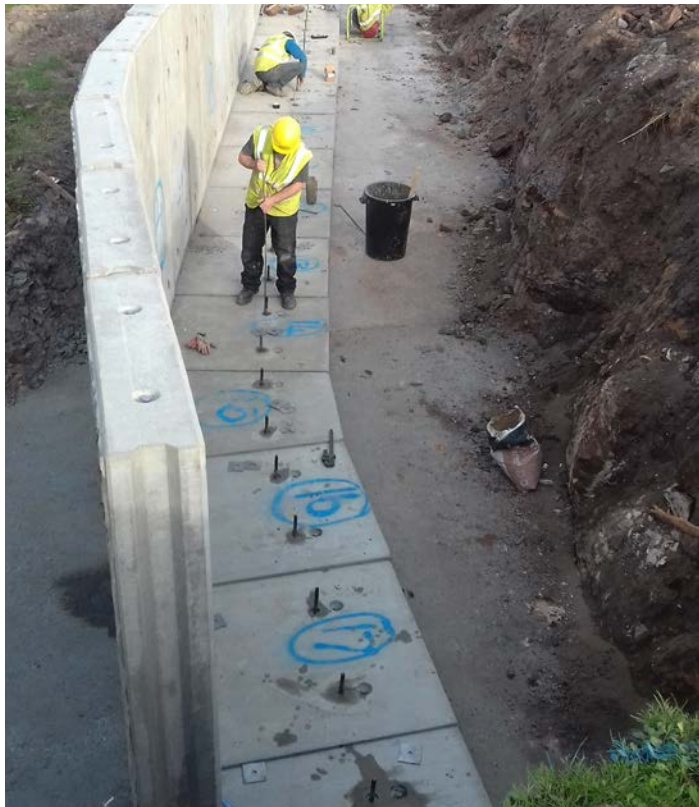
## Pier entrance

Public access to the tunnel at Roker Pier, Sunderland.



## Cockenzie

Protection to new housing development to create a sea wall above the tidal break, Firth of Forth, Scotland.



## Shoreham slipway

Capping beams and slipway planks for the Shoreham Adur tidal walls scheme.





## Retaining walls, pier columns and copings

Coastal defence project in Exmouth.



## Textured L shape retaining walls

Coastal defence project, Exmouth.





# Rail industry

We supply a range of precast products to the rail industry. From front wall units to platform copings, we can create an entire platform off site. When installed at working stations, the speed of installation provided by these precast units can minimise disruption amongst passengers and staff.

As part of Network Rail's Railway Upgrade Plan for trains running into London Waterloo, we supplied 65 cross beams, each of which was mounted onto footings constructed alongside the rail tracks. On top of these footings, we laid a beam & block flooring system, consisting of a total of nearly 1,000 beams – cut to various lengths of up to 4 metres.

This collaboration between teams allows us to provide effective solutions to your precast needs in an efficient manner.

To date, we have now supplied or secured work for the following stations across London and the South East railway network: Ashford, Whitton, St Margaret's, Putney, North Sheen, Effingham, West Hampstead, Twickenham, Staines and Barnes.



## Riser walls, over sails, and foundation slabs





## Railway arches

Network Rail project in Brixton, London.





# Building and construction

Due to the time saved on site, modern methods of construction (MMC) such as precast concrete are becoming more popular within the construction industry. In fact, this method can reduce overall wastage by as much as 50%.

The benefits associated with the use of precast concrete in these situations are plentiful. The better-quality product and

quicker installation on-site, leads to easier site management and reduced health and safety risks.

Working collaboratively with our other departments in the Poundfield operation, such as our beam and block flooring division, we can find bespoke solutions to your building and construction requirements.

## Ring Beams

Lime Wood Free School, Erith.

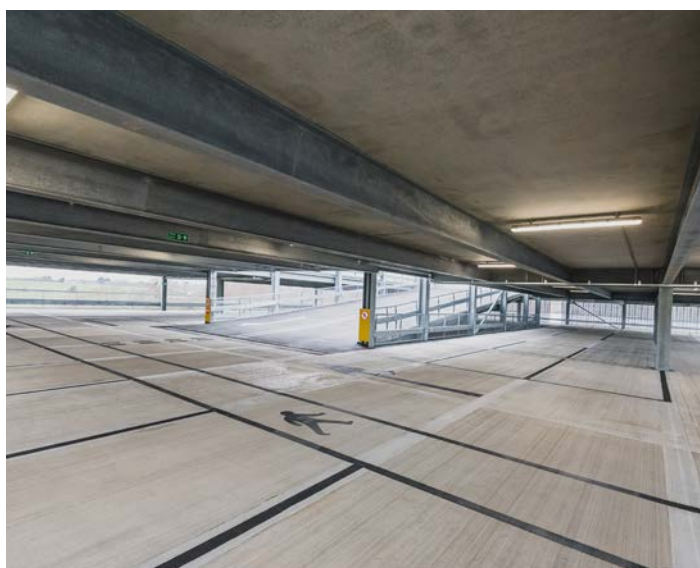
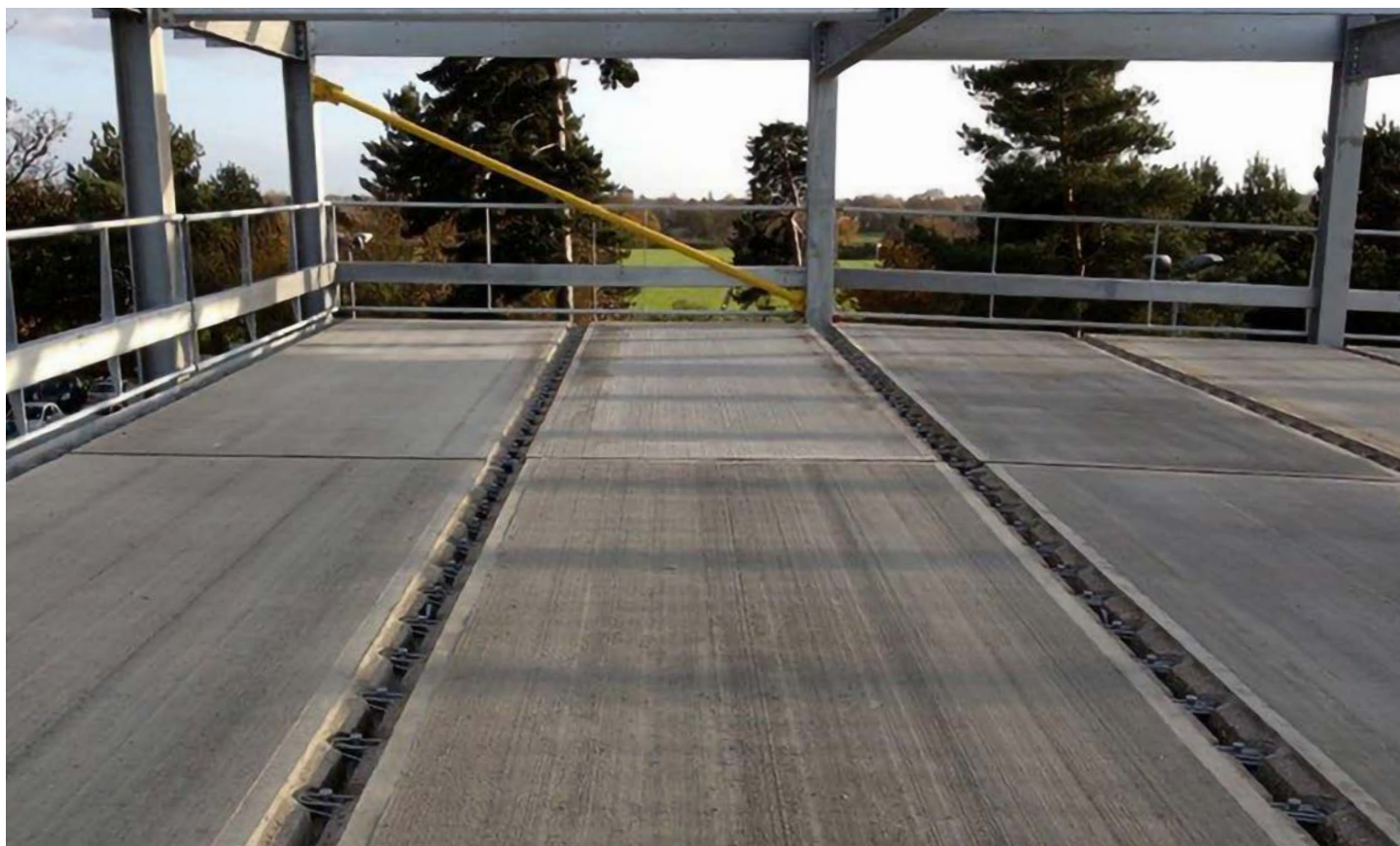




# Car parks

Due to the increased span achievable with precast concrete units, this construction method is becoming more popular when building multi-storey car parks.

The pre-cast slabs produced by Poundfield are regarded as a market-leader in this field. A recent audit by the leading car park and build business has found that our quality processes have proved to be excellent.





# Energy and utilities

## Solar panel ballast blocks



As environmental and economic issues have driven the need for alternative energy generation, the use of renewable sources have increased. Concrete is especially effective in these situations due to the protection it provides from radiation and resistance to attack by chemical erosion.

These properties have been tested in a number of projects we have been involved in:

- Sizewell A nuclear power station, where we provided concrete retaining walls to surround the active waste facility during its decommissioning.
- The UK Atomic Energy Authority's (UKAEA) Mega Ampere Spherical Tokamak (MAST) fusion experiment. Poundfield supplied precision cut blocks to form one of the walls around the main vacuum vessel. Chevron shaped, the blocks are designed to be easily removed in the future if required.

## Wall blocks

UK Atomic Energy Authority.



# Security



Precast concrete is particularly effective in ensuring the security of large sites or smaller storage facilities.

Tested to withstand significant use and abuse, our concrete products will stand up to high levels of force exerted upon them. Designed to protect sites, our retaining wall products have been used at large housing developments across the UK, and notably during the demolition and subsequent building of a Premier League football ground in London.

On a smaller scale, we built a precast 'bunker' for a local rifle club to safely store their guns. Operating to strict Home Office specifications, the storage facility comprises a reinforced concrete structure to the walls, floor and roof, with further protection provided by a steel fabricated door and an alarm system.



## Display plinths



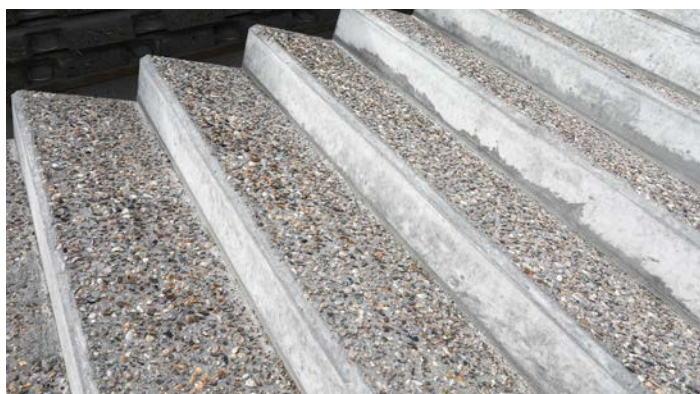
## Decorative finishes

Permanently exposed to view, architectural concrete requires special attention to the materials used, their placement and the finish.

The use of specialist finishes and local building materials helps precast concrete to blend in with its surroundings. With the most up-to-date designs created using rubber matting, any appearance can be applied off-site.

Depending on your requirements, our architectural concrete can be supplied in a variety of textures and finished using a range of specialist techniques and aggregates.

Whatever your bespoke concrete needs, we have the solution.





## Poundfield Precast

Our bespoke precast concrete department offers a comprehensive service from design through to finish, providing a wide range of solutions for many different projects throughout a variety of industries.

We work closely with you to understand your requirements and offer advice to ensure the best method of construction and unit design is achieved.

Our dedicated team has the knowledge and expertise to deal with the challenges of your project.

## SigmaRoc

Poundfield Precast are part of the construction materials group SigmaRoc Plc. An AIM-listed company, SigmaRoc brings together a team of construction materials, mining, contracting and investment experts who focus on niche markets within the heavy construction material sector.



**For further information please contact us on 01449 723150 or email [enquiries@poundfield.com](mailto:enquiries@poundfield.com)**

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